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**ABSTRACT**

The present invention relates to a method for the early diagnosis of cancer in a subject, which is based on determination of the relative fraction of microorganisms derived from the feces of the subject, as compared to the total count of microorganisms in the same or corresponding sample. This relation has been found to be indicative of the presence or absence of cancer in said subject.

After isolating at least one of the microorganisms from the fecal sample to form a so-called diagnostic sample, and incubating, for a sufficient time, the diagnostic sample with cancer cells, the microorganism being in an amount corresponding to its relative fraction in the original fecal sample, the cancerolytic activity of the microorganism/s is indicative to the presence or absence of cancer cells in the subject. The cancerolytic activity is expressed by means of a tumor cell necrosis index (TCNI).

Further, the method of the invention is based on determining level of expression or level of activity of L-PAR II in a fecal-derived microorganism/s sample, the level determined being also indicative of the presence or absence of cancer cells in the subject from which the fecal sample was derived.